

Calculation of the CCME Water Quality Index for Selected Rivers in the Georgia Basin

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The CCME (Canadian Council of Ministers of the Environment) Water Quality Index (WQI) is used to simplify complex water quality data from streams, rivers and lakes and communicate the results to a non-technical audience. The index produces a ranking (good, fair, poor, etc.) based on exceedences of objectives for key water quality variables in the watershed (e.g. acidity, fecal coliforms, dissolved oxygen). Environment Canada and the British Columbia Ministry of Water Land and Air Protection collaboratively maintain several water quality stations where chemical measurements are taken biweekly to detect trends. In 2003, an annual biomonitoring component was incorporated into these stations using the Canadian Aquatic Biomonitoring Network (CABIN) program. Benthic invertebrates are used in the CABIN program to assess the health of a stream. This paper details the WQI results for selected stations in the Georgia Basin, and discusses incorporating benthic invertebrate community data with water quality data for the calculation of the index.